

CHAPTER II

ECONOMIC ENVIRONMENT

This chapter discusses the economic environment and data used in forecasting aviation demand. The data used in this chapter come from several sources. United States economic data, derived from annual and quarterly statistics, are taken from the Office of Management and Budget (OMB), Congressional Budget Office (CBO), and a private forecasting service—Global Insight, Inc. (Formerly DRI-WEFA). Quarterly data for the three series used to develop the aviation demand forecasts--Gross Domestic Product (GDP), the Consumer Price Index (CPI), and the Oil and Gas Price Index--are presented as seasonally adjusted annualized rates.

Fiscal year (FY) estimates are calculated by averaging the 4 quarters for the period October through September. Global Insight, Inc. (GII) international economic forecasts provide the basis for the international aviation forecasts. The United States economic data are presented on a fiscal year basis, while international economic data are specified on a calendar year (CY) basis, unless otherwise indicated.

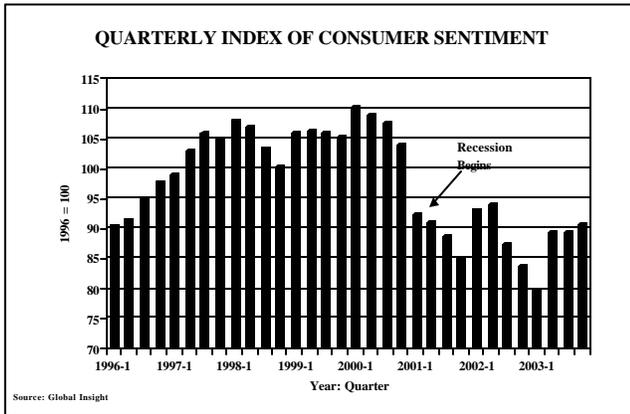
REVIEW OF 2003

The U.S. economy experienced its eighth consecutive quarter of expansion after the recession that encompassed the last 3 quarters of FY 2001 and ended shortly after the events of September 11th. Recovery from the economic downturn and terrorist attacks has proceeded in a sluggish manner being marred by the SARS epidemic and the war in Iraq. World economic growth has also suffered a slowdown over the past 3 years. However, all major regions of the world showed signs of improving economic conditions.

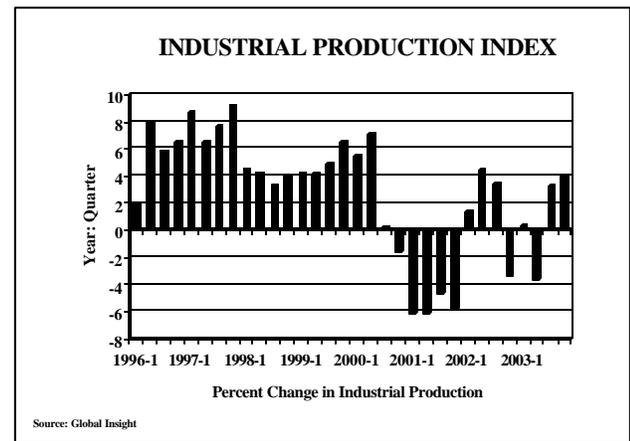
UNITED STATES

U.S. GDP continued to expand throughout 2003. The 1.4 percent annual growth in GDP in each of the first 2 quarters of 2003 represents a substantial slowdown from the 4.0 percent expansion pace of the 4th quarter of 2002. The first half of 2003 also stands in stark contrast to the rapidly expanding second half of the year when the economy expanded by 3.3 and 8.2 percent.

Consumer confidence, as measured by the University of Michigan's Index of Consumer Sentiment, fell off sharply in the last half of CY 2002 but rallied in the 2nd quarter CY 2003. The index rose substantially in the final 3 quarters of CY 2003, which bodes well for continued economic growth.



Demonstrating the weakness of the recovery and the sluggishness of the economy, the following chart shows a substantial decline in industrial production beginning in the 1st quarter CY 2001 that turned up in the 1st quarter of CY 2002 only to fall again in the 4th quarter. However, the index rose during the last two quarters of CY 2003. The up and then down nature of this recovery has created substantial uncertainty that, in itself, constrains growth.



Price inflation, measured by the consumer price index (CPI), increased modestly in 2003 with prices rising 2.3 percent, compared with a

1.6 percent increase a year earlier. Energy prices, which have a high degree of volatility, rose sharply in 2003 with the oil and gas price index rising 14.6 percent.

The unemployment rate reached 6.4 percent in June 2003 and has remained at or above 6.0 percent since April. This persistent high level of unemployment has marked this recovery as "jobless." Unemployment averaged 5.8 percent a year earlier.

The Federal Reserve Board (FED) has lowered interest rates 13 times since the beginning of 2001 as the economy has struggled its way out of the recession. The FED most recently cut in federal funds rate came on June 25, 2003 when it lowered the rate banks charge one another for overnight funds by 25 basis points, to 1.0 percent. This has brought short-term interest rates to a 45-year low. The prime-lending rate for many short-term consumer and business loans remains at 4 percent, the lowest level since 1959.

WORLD

Worldwide GDP grew by 2.5 percent in 2003, up from 2.0 percent growth in 2002 and 1.3 percent in 2001. Although much of the economic uncertainty of the past 2 years has dissipated, some world regions continue to lag. The substantial problems nagging Western Europe and Latin America threaten the world-wide recovery.

Western Europe continued its significant economic slump in 2003. Important factors contributing to Europe's problems are the continuing sluggishness of the German economy and the tight fiscal and monetary policies throughout the region. Already high unemployment rates continue to increase. In Germany unemployment has reached 10 percent.

Eastern Europe grew at 3.6 percent in 2003 a significantly faster pace than the 2.7 percent rate of a year ago. This relatively fast growing region has several factors spurring its growth including expanding exports, increased direct foreign investment, and relatively low labor costs.

The oil-based economies of the Middle East and North Africa grew by 2.8 percent in 2003. The Iraqi war and the Israeli-Palestinian conflict, along with fears of terrorism, have undermined tourism and investment in this region. The relative strength in oil export revenues has helped to maintain economic stability in the region.

Despite the outbreak of SARS, the combined GDP of Asia (including Australia and New Zealand) grew 3.6 percent in 2003, up from 2.4 percent a year earlier. Japan, Asia's largest economy, grew by 2.2 percent in 2003. Although less than the average growth in the rest of Asia, it represents a significant improvement over last year's 0.2 percent pace. Asia's export sector and fast growing high tech industries have driven this expansion.

Latin America economies continued its weak performance during 2003, with region-wide GDP expanding by only 1.3 percent. However, this growth showed a substantial improvement over last years 2.1 percent loss. The entire region suffers from high unemployment and continued political uncertainty. The countries of Brazil, Colombia, and Venezuela each have severe economic problems.

The G-7 nations—U.S., Canada, United Kingdom (U.K.), Germany, Italy, France, and Japan—reported growth rates ranging from zero in Germany to 3.0 percent in the U.S. Other European G-7 countries, France and Italy, also reported slow growth with GDP growing 0.2 and 0.5 percent, respectively. Canada, Great Britain, and Japan registered economic growth of 1.7, 2.0, and 2.2 percent, respectively.

Price inflation was modest in all the G-7 nations in 2003. The U.K. had the highest inflation rate (2.9 percent) followed by Canada and Italy with price increases of 2.8 and 2.7 percent, respectively. The U.S., France, and Germany had rates of 2.3, 2.0, and 1.0 percent, respectively. Japan experienced price deflation of 0.3 percent.

Among G-7 nations, short-term interest rates ran from a high of 3.7 percent in the U.K. to a low of zero in Japan. Germany, France and Italy had a 2.3 percent rate in line with European Union (EU) policy. The U.S. had a rate of 1.0 percent while Canada reported a 2.9 percent rate. With the exception of Canada, each of the G-7 nations lowered their short-term interest rates in 2003, with EU nations lowering their rates by 100 basis points.

Six of the G-7 nations appreciated their currencies against the dollar in 2003. EU nations appreciated the most with the Euro increasing its value 19.6 percent relative to the dollar. The Canadian dollar (C\$), the Japanese yen (¥), and the British pound (£) each appreciated by 12.2, 8.9, and 7.9 percent respectively. Hence, U.S. citizens' trips abroad have become more costly, while visits to the U.S. from abroad have become less expensive.

U.S. ECONOMIC OUTLOOK

The economic assumptions used in developing the FAA baseline aviation forecasts are derived from estimates provided by the Executive Office of the President, Office of Management and Budget. GDP projections are Bureau of Economic Analysis (BEA), 1996 chain-weighted estimates.¹ Forecasts

¹ The Bureau of Economic Analysis (BEA) released its revised estimates of GDP and other national income and product accounts on December 10, 2003. Quantities, or

for the Congressional Budget Office (CBO) and Global Insight Inc. (GII) are also shown.

LONG-TERM ECONOMIC OUTLOOK

SHORT-TERM ECONOMIC OUTLOOK

Graphics on the following page show a favorable forecast for economic growth during the next 2 years. OMB projects GDP to grow 4.0 percent during each quarter in 2004. GII predicts somewhat slower growth during the 1st quarter (up 3.5) but considerably stronger growth over the remaining 3 quarters of the year—up 4.4, 4.5, and 5.0 percent. CBO also predicts slower growth during the 1st quarter (up 3.8 percent), then stronger growth throughout the remainder of the year—up 4.5, 4.3, and 4.2 percent, respectively, over the last 3 quarters of 2004.

Moderate price inflation is expected to accompany the economic rebound in 2004 and 2005. According to OMB, prices as measured by the CPI, are projected to increase at a modest pace of 1.2 percent in the 1st quarter 2004 and to gradually pick up to 1.6 percent rate by the 4th quarter of 2005. After rising sharply in the first quarter 2004, volatile fuel prices, as measured by the oil and gas price index, are expected to decrease rapidly through the remainder of 2004 and the first half of 2005. OMB expects energy prices to climb 9.0 percent rate in the 1st quarter of 2004 and decrease in each of the next quarters at rates ranging from 16.9 percent in the 3rd quarter of 2004 to 8.6 percent in the 2nd quarter of 2005. Oil prices are forecast to rise slightly by 1.3 and 1.5 percent in the final two quarters of 2005.

“real” measures, and prices were rebased to calendar year 2000. The economic forecasts used to develop this year’s FAA aviation forecasts were prepared prior to the revisions.

The long-term economic outlook for the U.S. economy shows real GDP growth averaging 3.3 percent over the 12-year forecast. (See graphics on page 6.) Long-term economic growth depends on growth in the factors of production—labor, capital, and technology. The relative mix of these factors combined with the state of technology determines productivity of each factor.

Labor supply depends on population growth and its composition. National savings determine capital accumulation. Technology can expand the productivity of both factors. In sum, changes in the factors of production and the state of technological development affecting those factors determine economic growth.

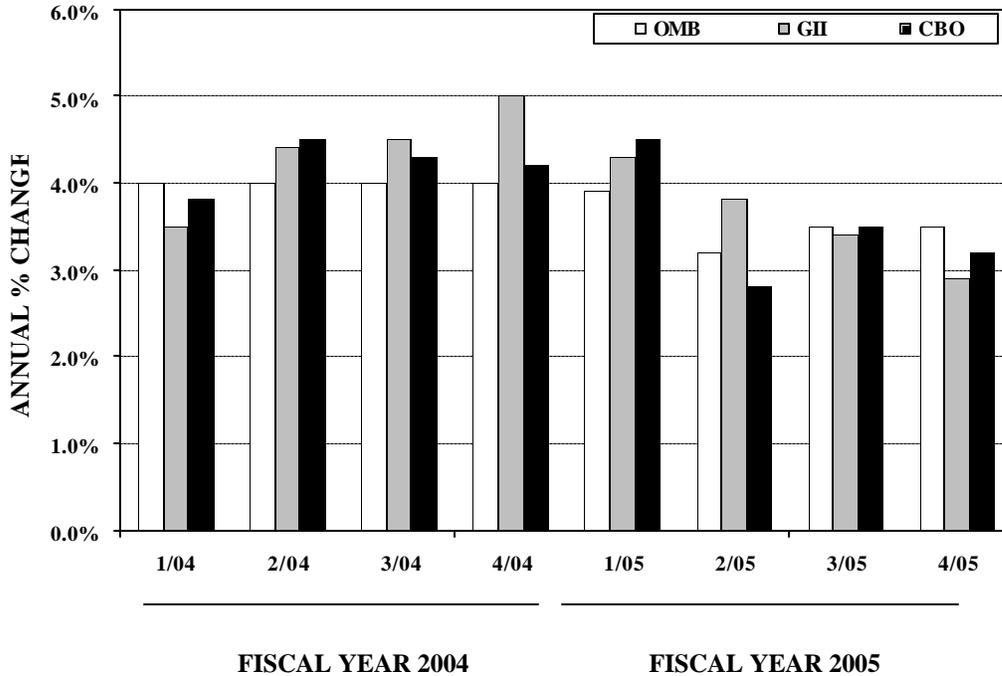
Although the economic recovery has remained sluggish until just recently, the U.S. economy finds itself poised for substantial long-term income growth. While the labor supply will expand moderately during the forecast period, other factors such as low interest rates, continued capital investment, and productivity improvements from the cyber revolution should provide a solid base for future expansion.

The U.S. population is expected to expand at 0.8 percent annually over the forecast period according to GII. Based on the growth in population and labor force participation rates, the U.S. labor force will grow at a 1.0 percent pace over the period. Employment, based on the Bureau of Labor Statistics (BLS) establishment survey, is projected to increase 1.4 percent annually, from 130.1 million in 2003 to 153.4 million in 2015. Technology and the ratio of capital to labor determine productivity.

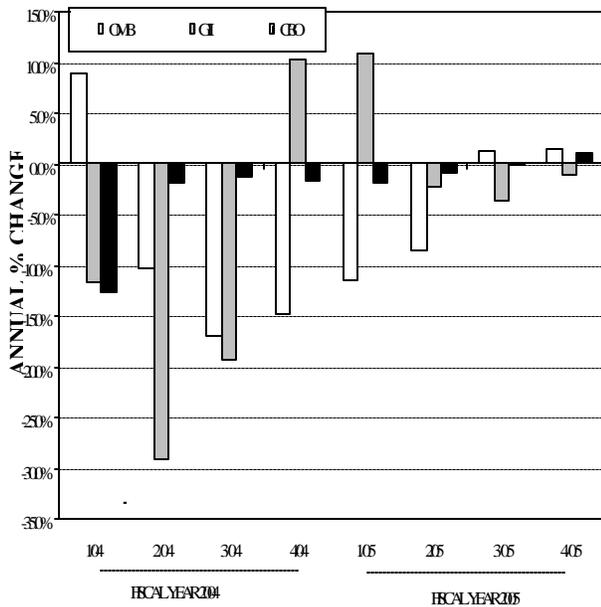
Continued growth in business investment over the forecast period implies further productivity

U.S. SHORT-TERM ECONOMIC FORECASTS

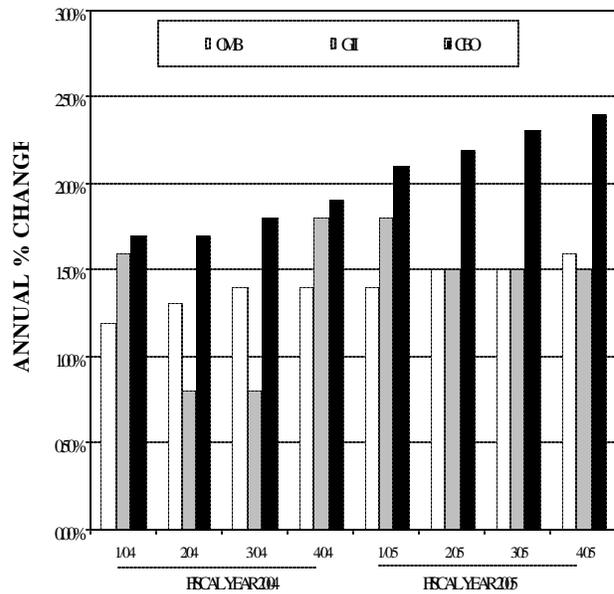
REAL GROSS DOMESTIC PRODUCT (1996 DOLLARS, CHAIN-WEIGHTED)



OLANDGASPRICEINDEX 1996=100

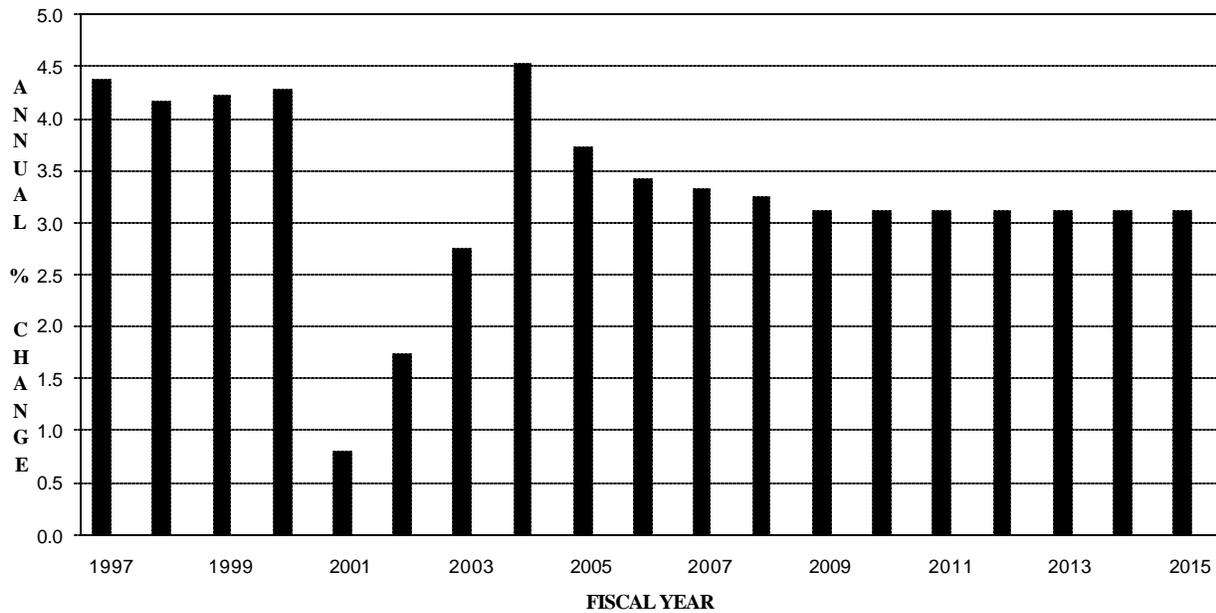


CONSUMERPRICEINDEX (1982=100)

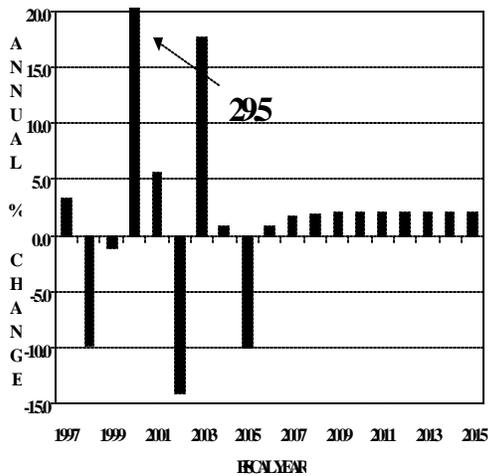


U.S. LONG-TERM ECONOMIC FORECASTS

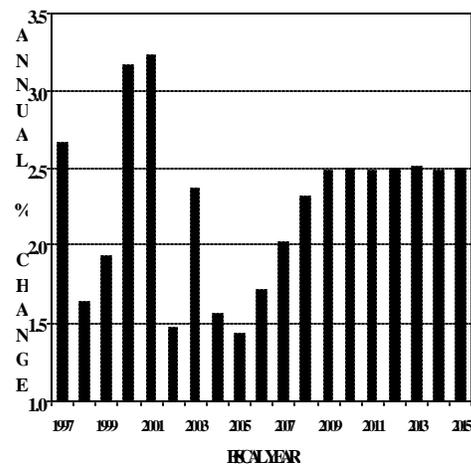
GROSS DOMESTIC PRODUCT (1996 DOLLARS, CHAIN-WEIGHTED)



**OLANDGASPRICE INDEX
(1996=100)**

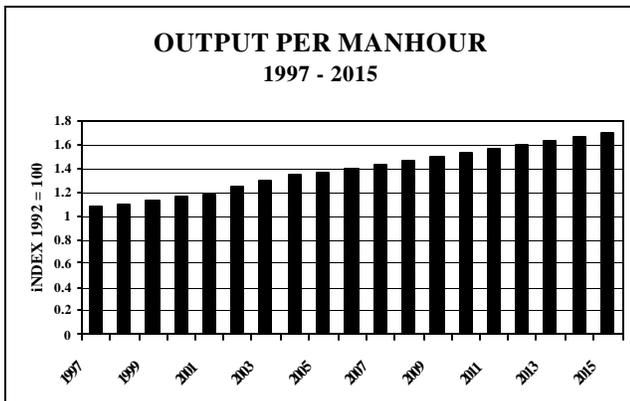


**CONSUMER PRICE INDEX
(1982=100)**



increases. Therefore, wages will continue to rise over the forecast period. U.S. companies are projected to continue capital accumulation at a pace of 4.4 percent annually.

Productivity, as measured by output per hour, is forecast to rise 2.3 percent annually over the next 12 years. The following graph presents historical and forecast output per hour between 1997 and 2015.



Inflation is expected to remain moderate during the forecast period. OMB projects a 2.2 percent annual price increase through 2015. Fuel prices are forecast to rise slightly in 2004 (up 0.7 percent), decline by 10.0 percent in 2005, and then increase at an average annual rate of 1.8 percent over the remainder of the forecast period. In real terms, oil prices are expected to decline at a 1.5 percent annual rate over the forecast period.

ALTERNATIVE FORECASTS

Alternative short-term U.S. economic forecasts are given in Chapter X, Table 1, as prepared by OMB, Global Insight (GII), and CBO; Tables 2 and 3 present their long-term forecasts. Over the 12-year forecast period, both GII and CBO forecast slower growth than OMB (up 3.3 percent)—3.2 and 3.0 percent, respectively. growth. GII and CBO both predict higher price inflation over the forecast period—up 2.3 and 2.4 percent, respectively,

compared to 2.2 percent for OMB. GII and CBO predict that fuel prices will increase by 1.8 and 1.5 percent, respectively, over the 12-year forecast period. This compares to the significantly lower OMB projection of only 0.7 percent annual increase.

WORLD ECONOMIC OUTLOOK

The principal economic issues related to FAA's international traffic forecasts are discussed below. International economic data are presented in tabular form in Chapter X, Tables 4 through 6. International GDP data are presented on a calendar year basis and are expressed in 2000 U.S. dollars. GDP and exchange rates for individual countries, as well as groups of countries, are obtained from GII.

WORLD GDP

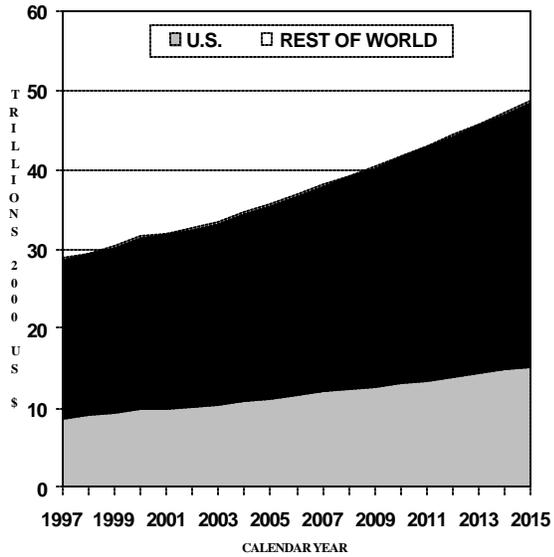
The graphics on the following page depict both the historical trend and projected GDP growth for major economic regions of the world. Worldwide GDP is projected to increase by nearly \$1.2 trillion to a level of \$34.5 trillion in 2004, an annual increase of 3.7 percent. Over the 12-year forecast period, world output is projected to reach \$48.5 trillion, an annual growth rate of 3.2 percent.

Canada

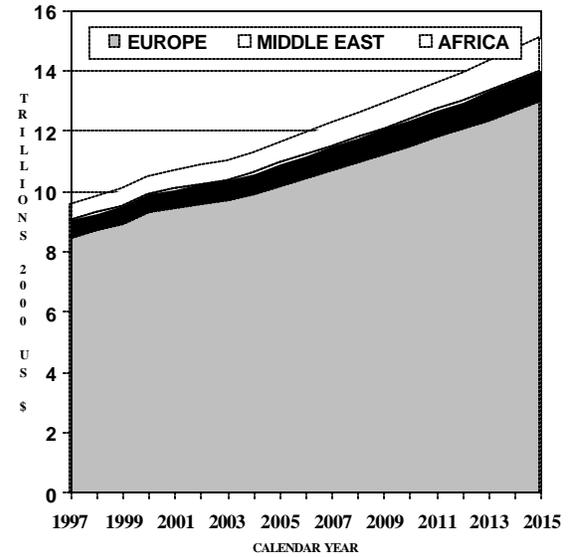
Canadian economic growth has outpaced U.S. growth from 1999 to 2002. However, this past year's growth (1.7 percent) fell below the U.S. pace. Canada's GDP is projected to increase by 3.6 percent in both 2004 and 2005. Remaining

GROSS DOMESTIC PRODUCT BY WORLD REGION

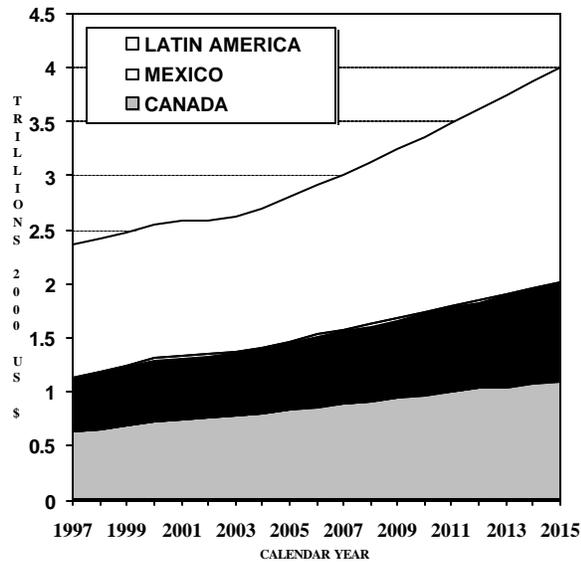
WORLD



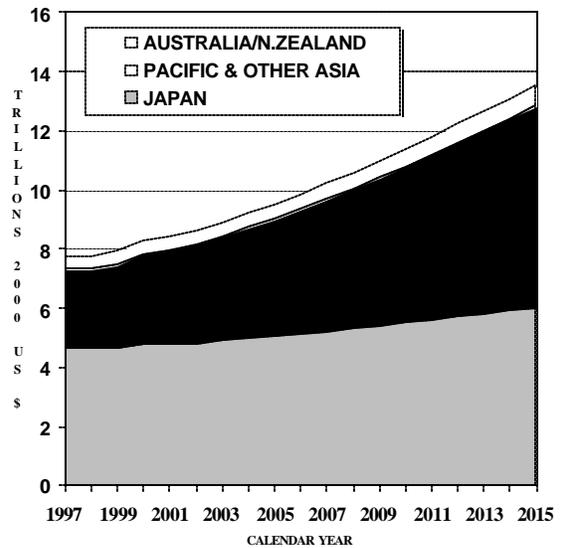
EUROPE/MIDDLE EAST/AFRICA



CANADA/MEXICO/LATIN AMERICA



JAPAN/PACIFIC & OTHER ASIA/AUSTRALIA & NEW ZEALAND



somewhat dependent on the U.S. economy, Canada's economy is projected to grow 3.0 percent a year over the forecast period. Highly dependent on U.S. trade, Canada's economy is projected to grow 3.0 percent a year over the forecast period.

Exports make up a substantial portion of Canada's economy. As a member of the North American Free Trade Area (NAFTA), Canada has fueled its growth over the past few years with trade. In 2003, a weak tourism industry and restricted exports of beef and softwood lumber lowered export performance in 2003. Tourism was impacted by a 10.8 percent appreciation of the Canadian dollar relative to the U.S. dollar and the SARS epidemic in Toronto. With the recovery of the U.S. economy, Canada remains well poised to take full advantage of its close economic and political ties with the U.S.

The Bank of Canada has left standing the 170-basis-point gap between Canadian and U.S. rates. The higher interest rates combined with an appreciating Canadian dollar provide substantial monetary tightening. Fiscal policy also remains tight. Canada continues to lower taxes with the Federal capital tax slated for reductions over the next 5 years.

Two key factors affecting the Canadian economy provide risk for the short-term forecast. First, the Canadian dollar has evaluated upward strongly over the past year. The Canadian dollar moved up 11.0 percent relative to the U.S. dollar in 2003. This has made Canadian exports more costly and, hence, reduced demand to the rest of the world for Canadian products. Second, as long as the U.S. economy continues to grow, Canadian exports to the U.S. should also continue to grow. Exports to the U.S. account for 36 percent of Canada's GDP. A weakening of the U.S. recovery would directly affect the growth in Canadian output.

Pacific/Far East

The combined economies of Asia and Oceania--including Japan, the developing Asia Pacific, China, India, and Pakistan, along with Australia and New Zealand—grew by 3.6 percent in 2003, a substantial rebound for this booming economic region after several years of sluggish growth. GII projects Asian GDP to increase by 4.0 and 3.9 percent, respectively, in 2004 and 2005. Over the forecast period, the combined Asian GDP is projected to grow 3.6 percent annually, from \$8.9 to \$13.6 trillion.

Asia appears to have rebounded well from the SARS crisis with tourism showing signs of recovery. Another positive side to the Asian economy is the resurrection of the technology sector. For instance, the semiconductor industry has expanded rapidly during 2003. Deflation that has haunted much of Asia in the past few years has eased somewhat. However, falling prices remain a challenge in Hong Kong and Japan.

Japan's GDP, which makes up 47 percent of Asian economic output, grew by 2.2 percent in 2003 after marginal increases of 0.4 and 0.2 percent over the past 2 years. The world's second largest economy is projected to grow 2.4 percent and 2.3 percent in 2004 and 2005, respectively. Over the forecast period, GII projects that Japan's GDP will expand by 1.9 percent annually.

Japan's lingering economic slump appears to be in the past. However several factors limit Japan's potential economic growth. The country continues to support excess capacity in its heavy industries; it suffers from a long-term downtrend in capital investment; and deflation has made monetary policy ineffective. Additionally, Japan's declining population will place limits on its rate of growth.

Prices in Japan have fallen at a pace of between 1 and 2 percent a year over the past half-decade.

This deflation has fed the countries protracted economic slump. With nominal interest rates at near zero, monetary policy cannot push real interest rates down further. In this classic liquidity trap situation, Japan's central bank is unable to stimulate the economy no matter how expansive its monetary policy.

Japan, in its efforts to restructure its economy has increasingly turned to layoffs as a remedy. The much touted guaranteed "lifetime employment" has become a myth of the past as domestic and international competition has forced businesses to become more flexible. The unemployment rate, now at 5.4 percent is projected to rise to 6 percent in the next few years.

The Japanese forecast faces several risks. As the yen continues to appreciate, Japan's export industries will face weakening demand. Many Japanese have removed themselves from the labor market because of what they see as poor job prospects. This lowers the unemployment rate, but it also reduces growth potential. Perhaps more significantly, the dangers presented in the nuclear standoff with North Korea hangs over the entire north Asian region like a pall.

The economies of the Pacific and developing Asia--the Pacific Basin, China, India, and Pakistan--continue their very strong and rapid growth. This region grew at an average 67 percent during the 1990's. GDP for this area rose by 5.6 percent in 2003 and is projected to climb 6.4 and 6.0 percent, respectively, in 2004 and 2005. Over the forecasts period, GDP is forecast to rise 5.7 percent annually.

China's output makes up approximately 30 percent of Asia's output outside of Japan. This very rapidly growing economy expanded by 8.3 percent in 2003 and is forecast to grow 7.9 and 7.2 percent over the next 2 years. Over the next 12 years, China will grow at 6.6 percent annually.

Although Asia appears to have a prosperous future, its forecast is clouded with risk. Terrorism threatens many Asia nations with the emergence of radical Islamic groups. The uncertainties related to North Korea's nuclear disarmament also provide substantial uncertainties to the forecast.

Latin America

Mexico and Latin America continue to work their way through tough economic times. The GDP of Mexico grew by 1.0 percent in 2003 after rising only 0.9 percent a year earlier. However, Mexico is expected to rebound with growth of 2.9 and 3.5 percent over the next 2 years. Over the forecast period, Mexico is forecast to grow at a 3.6 percent pace. The countries of Latin America and the Caribbean grew by 1.3 percent in 2003. However, growth is a considerable improvement over last years GDP decrease of 2.1 percent. Latin America is expected to grow by 3.8 and 3.6 percent in 2004 and 2005, respectively. Over the forecast period, this region is projected to grow at 4.0 percent annually.

Mexico, much like Canada, depends heavily on trade with the U.S. Ninety percent of Mexican exports go to the U.S. To the extent that the U.S. continues its recovery, this will assist Mexico in putting its economic doldrums behind it. The export of oil has substantially assisted in the improvement of the Mexican economy over the past year. Nevertheless, the maquiladora-manufacturing sector has lagged due in part to competition from China. GII expects Mexican manufacturing exports to improve significantly in 2004.

With many structural reforms underway in Mexico, a significant impediment to further expansion is the continued depreciation of the peso. The general weakening of the U.S. dollar should assist Mexico in this area.

As in the past, Mexico's largest risk comes from its heavy dependency on trade with the U.S. Hence, the fate of the Mexican economy lies in the performance of the U.S. economy. Another risk is the price of oil. A rapid decline in the price of oil would substantially impact Mexico's growth path.

A year has made a considerable difference for Latin America's second largest economy, Argentina. After its worst crisis in history, economic growth is finally underway. After four successive years of economic decline, cumulating in a 10.9 percent drop in 2002, Argentina grew by 6.9 percent in 2003. Growth is expected to continue with at a 3.5 percent annual rate over the forecast period.

The Argentinean peso has fallen to a very competitive value and this has created a boom in commodity exports, especially agricultural commodities. Additionally, the Kirchner administration has performed very well in keeping a lid on public sector costs, including public utility prices. A major risk facing Argentina is the potential for increased social discontent with public services.

Latin America's largest economy, Brazil, grew by a sluggish 0.4 percent in 2003, the third consecutive year of slow growth. GII projects growth to pick up this coming year, with GDP growing 3.2 and 3.3 percent in the next 2 years. The long-term growth target for Brazil is 3.9 percent.

Brazil has a mostly optimistic long-term economic outlook, however, significant risks cloud the future. Price inflation threatens to undermine Brazil's economic stability. Over the past year, inflation has risen from 6 percent to 17 percent. This very high rate of inflation is the make or break issue for the Lula administration. Needed pension and tax reforms continue to wind their way through Brazil's political system. Without this reform, the government debt will continue to grow at rates that will affect the entire Brazilian economy.

Europe/Middle East/Africa

The combined economic output of all Europe, the Middle East, and Africa grew by 1.2 percent in 2003, the third consecutive year of below average growth. This European dominated region is forecast to grow by 2.4 and 2.9 percent over the next 2 years. Over the 12-year forecast period, this region is expected to grow 2.6 percent a year.

Western Europe, responsible for 84 percent of the region's output, grew by only 0.8 percent in 2003. Western Europe is dominated by the European Union (EU) countries--Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom--and is forecast to increase by 2.0 and 2.5 percent, respectively, in 2004 and 2005. Over the forecast period, Western Europe is projected to grow 2.2 percent annually.

Trade has presented the EU with a sizeable challenge. Exports have been weakened by the growing strength of the euro. A strong euro will likely maintain a drag on trade as EU policy makers work to preserve its strength to assure the euros place among world currencies. Additional pressure will come from the declining U.S. dollar.

The EU has several factors obstructing growth in the near term. Fiscal and monetary policy reaction to the downturn by the authorities has been passive. With strong deflationary pressures, EU monetary and fiscal authorities have acted too little, too late. Additionally consumer demand and business investment are weak. Consumer confidence reached a 9-year low and business investment contracted 0.7 percent in 2003.

The EU faces numerous risks in its forecast. A renewed wave of terrorist assaults would dampen growth. The dependency on trade with the U.S. means that a weakening of U.S. economic growth

would slow EU trade. A further appreciation of the euro will raise the price of EU exports and further lower demand. And, a continuation of tight monetary and fiscal policy under present conditions will lower expected GDP growth.

Emerging Europe, which includes the countries of Eastern Europe and former Soviet Republics, expanded its combined GDP by 5.0 percent in 2003. This up-and-coming region is projected to grow 4.9 percent in 2004, 4.7 percent in 2005, and expand at an annual average rate of 4.4 percent over the forecast period.

Export trade that in turn fuels its manufacturing base notably supports this region's growth. Additionally, expansionary monetary and fiscal policy throughout this region will continue to foster economic expansion. Higher oil prices have assisted growth in the former Soviet Union countries, particularly the countries of Russia, Kazakhstan, and Azerbaijan.

The oil-producing and commodity-exporting regions of the Middle East and Africa grew by 2.7 percent in 2003 and are forecasts to rise 4.2 and 4.7 percent, respectively, in 2004 and 2005. For the next 12 years, the region is expected to grow at 4.1 percent annually. This region's dependence on the production, sale, and export of oil places its fate in the hands of the volatile oil market. The price of a barrel of oil in 2003 is \$25.5 and is forecast to remain in the \$22 to \$28 a barrel level over the next couple years and to rise slightly over the forecast period.

This region faces substantial risks. A collapse in oil prices, caused perhaps by increased production in Russia and Iraq, would appreciably decrease economic growth in this region. A rise in the current crises in Palestine and Iraq could spread and cause mass civil unrest in the region. The rise of Islamic fundamentalism could destabilize countries like Saudi Arabia causing disruptions in oil markets.

DOLLAR EXCHANGE RATE

Graphics on the following page present historical and forecast values for the U.S. trade-weighted nominal exchange rate index with selected other developed countries.² The trade-weighted exchange rate measures the relative purchasing power of the U.S. dollar against economically developed countries accounting for trade differences. The graph also displays the historical and projected dollar exchange rates against the Japanese yen and the euro. Table VI in Chapter X displays the historical and forecast exchange rates from 1998 to 2015 for the Canadian dollar, the British pound, the Japanese yen, and the European Union euro.

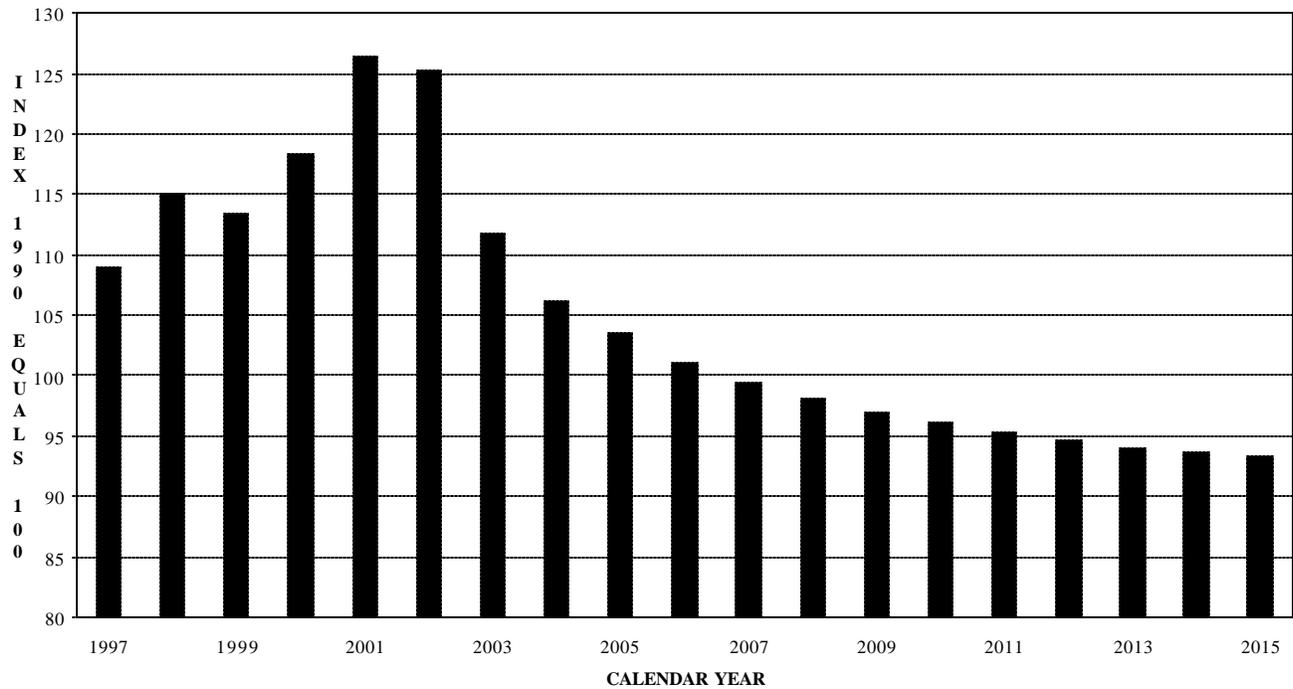
The U.S. dollar on trade-weighted terms tumbled against its major trading partners in 2003. The dollar is forecast to continue its decline against the currency of trading partners throughout the 12-year forecast period, declining 2.4 percent annually. The U.S. dollar fell against the Canadian dollar in 2003-one Canadian dollar cost \$0.714 in 2003 compared with \$0.637 a year earlier. The appreciation of the Canadian dollar is expected to continue with an increase to \$0.784 in 2004 and to \$0.861 by 2015.7.

The Japanese yen also appreciated against the dollar in 2003, rising 7.9 percent to \$8.61 per ¥1,000. Over the forecast period the yen is forecast to rise by an average of 2.5 percent per year, reaching \$11.60 per ¥1,000 in 2015. The

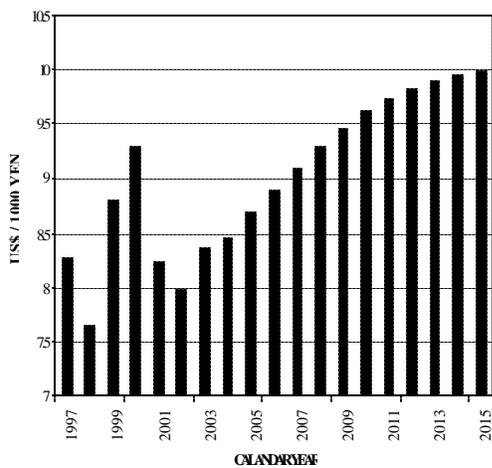
² Note: A fall in the index implies a depreciation of the dollar against other currencies; a rise in the Euro and yen also implies a depreciation of the dollar.

EXCHANGE RATE TRENDS AND FORECASTS

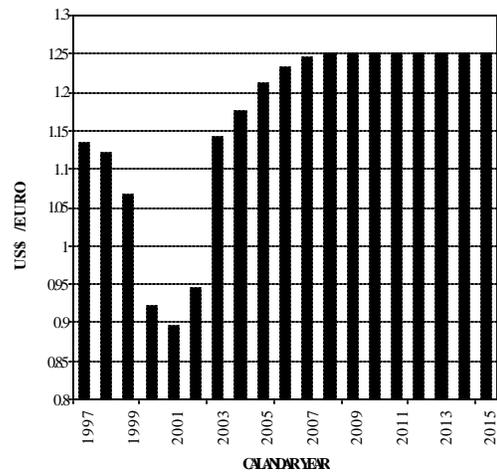
U.S. TRADE-WEIGHTED EXCHANGE RATE (NOMINAL RATE WITH OECD COUNTRIES)



JAPANESE YEN



EUROPEAN EURO



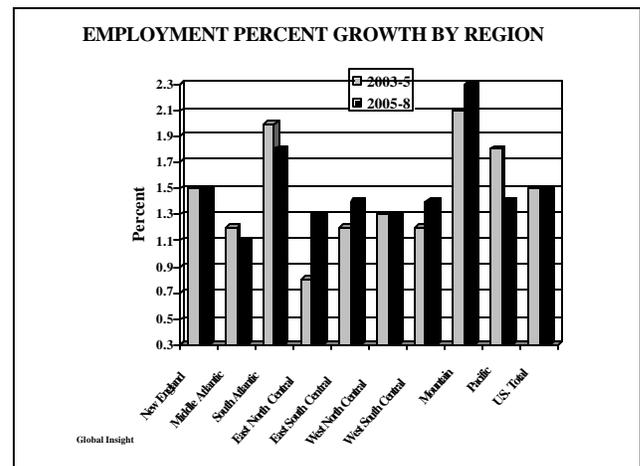
euro surged 19.6 percent against the dollar in 2003 after a 5.5 percent rise the previous year. Over the next 12 years, the euro is projected to continue to rise 1.6 percent a year to 1.36 to the dollar in 2015.

U.S. REGIONAL ECONOMIC GROWTH

In 2003, U.S. economic growth began to pick up momentum. However, the recovery varies widely by region. Three regions are clearly on the upward track: South Atlantic, Mountain, and Pacific. At the opposite end of the spectrum, the East North Central region, the manufacturing heartland, continues to contract.

The chart below shows the employment growth forecast by region for two periods: 2003 to 2005 and 2005 to 2008. Each region has its own character and faces its own challenges. The Mountain region, including Arizona, New Mexico, Colorado, Nevada, Montana, Idaho, and Utah, leads the country in employment growth. Three industry sectors, educational and health services (3.6 percent growth), financial activities (2.5 percent growth), and leisure and hospitality (1.0 percent growth) led this region's recovery.

The second fastest growing region, the South Atlantic, consists of Delaware, Florida, Georgia, Maryland, North and South Carolina, Virginia, and West Virginia. This region's growth is driven by its service and tourism industries. Also high-tech industries and new manufacturing contribute to the region's growth. For instance, the Scripps Institute, a biomedical research group, will build a large campus in Palm Beach County. Also, DaimlerChrysler plans to build a large new plant near Savannah.



The East North Central region, consisting of Illinois, Indiana, Michigan, Ohio, and Wisconsin, makes up most of America's industrial heartland. Manufacturing accounts for 17 percent of this region's employment compared to 13 percent nationwide. The recession in heavy industries has particularly distressed this region. Automakers, for instance, continue to suffer from the burden of overcapacity and heavy pension obligations. The newspapers of this region are replete with layoff notices such as the cutbacks at DaimlerChrysler, Great Lake Chemical, AvrinMeriter, Pfizer, and Lucent Technologies.

The following table shows the 10 fastest growing metropolitan areas ranked by annual employment growth from 2003 to 2004. Las Vegas continues to lead the list, having become both a leading tourist destination and retirement community in the country. All the cities on this list are in four Sunbelt states: Florida (6), Nevada (2), California (1), and South Carolina (1).

TOP 10 METROPOLITAN AREAS IN EMPLOYMENT GROWTH 2003 – 04		
Metropolitan Area	2003 Employment (000s)	2003-04 Growth (%)
Las Vegas, NV	805.8	3.9
Naples, FL	115.6	3.8
West Palm Beach, FL	540.3	3.4
Fort Myers, FL	185.2	3.2
Reno, NV	198.4	3.2
Orlando, FL	922.2	3.2
Punta Gorda, FL	58.8	3.2
Myrtle Beach, SC	102.3	3.1
San Luis Obispo, CA	120.9	3.0
Sarasota, FL	281.7	3.0

The usual suspects for this worst-case scenario include a rapidly declining dollar and rising oil prices. A continued decline in the dollar might alarm financial markets causing substantial increases in U.S. long-term interest rates. Oil demand in China and emerging Europe could surge and the situation in Iraq could deteriorate causing a spike in oil prices affecting worldwide economic growth.

Further risks arise from an expansion in the Iraqi conflict and terrorist activity. A substantial increase in the Iraqi war may lead to political and economic turmoil in the U.S. as the cost of the conflict rises. Terrorist activity against U.S. interests in the U.S. and abroad would lead to reduced travel and lower business and consumer confidence.

RISKS TO THE FORECAST

Although the economy appears headed for sustained growth, the large adjustments in the U.S. and world forecasts over the past few years demonstrate the potential risks in the forecasts. The chart on the following page shows U.S. and world GDP, CPI, and energy prices forecasts for the past 3 years.

The chart shows that the unexpected terrorist attacks, Iraqi war, and economic downturn pushed out projected U.S. GDP growth by about one year. The worldwide slowdown, Iraqi war, and SARS epidemic pushed the global GDP forecast out by 2 years. The price inflation forecast has also been reduced by the economic slowdown. The remarkable volatility of energy prices is demonstrated in this chart, which shows that oil prices are forecast substantially higher than previously projected.

The U.S. expansion appears to be on a firm basis. GII puts the chance of a significant drop in business and consumer confidence and an accompanying economic slowdown at 20 percent in the near term.

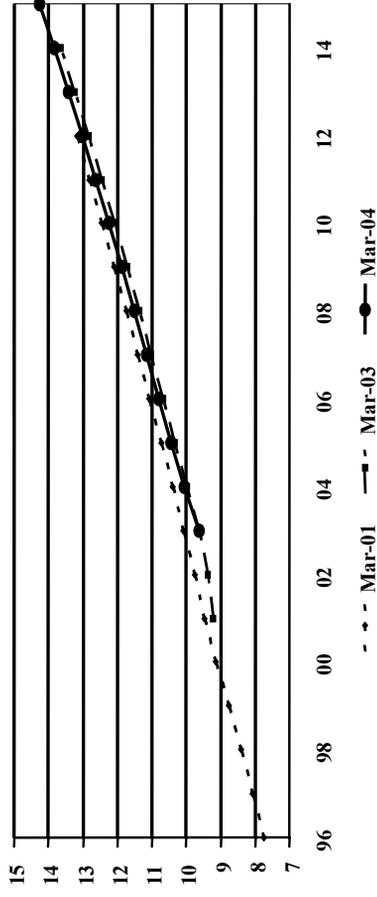
SUMMARY AND IMPACT ON AVIATION

The travel industry is beginning to climb out of its 3-year slump. Expenditures on intercity travel declined 25 percent from their peak (4th quarter 2000) to its trough (4th quarter 2001). The slump continued through the 3rd quarter 2003. The following chart shows expenditures on intercity travel in the U.S. from the 1st quarter 1996 to the projected 4th quarter 2005. Although the industry is expected to continue to recover in 2004, expenditures will only reach 1999 levels by the end of 2005.

Forecast Comparisons

U.S. Gross Domestic Product

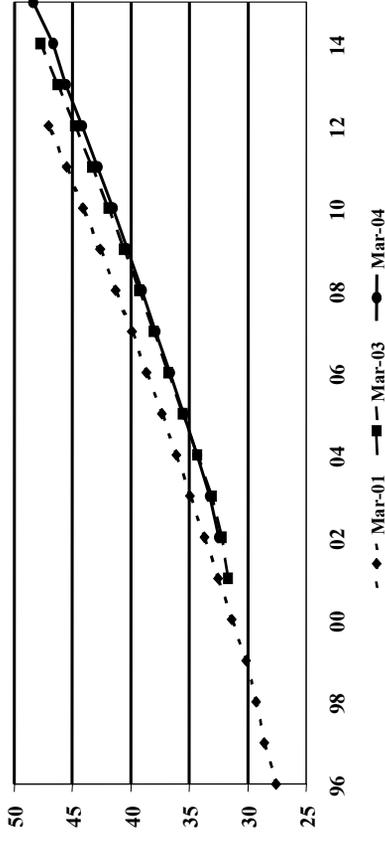
Trillions of 1996\$



Source: OMB

World Gross National Product

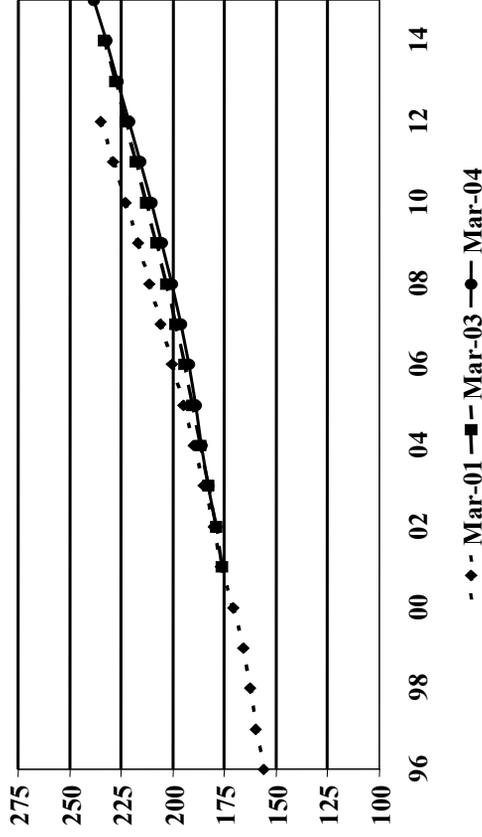
Trillions of 2000 US\$



Source: Global Insight

Consumer Price Index

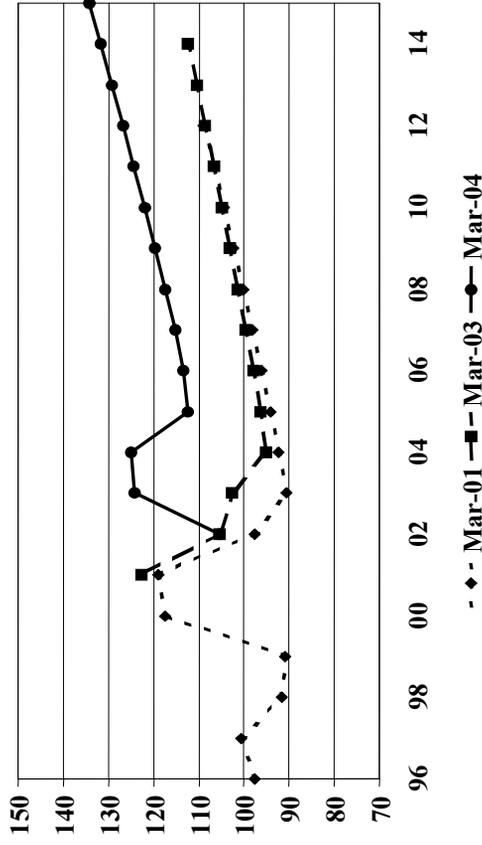
Index 1982-84 = 100



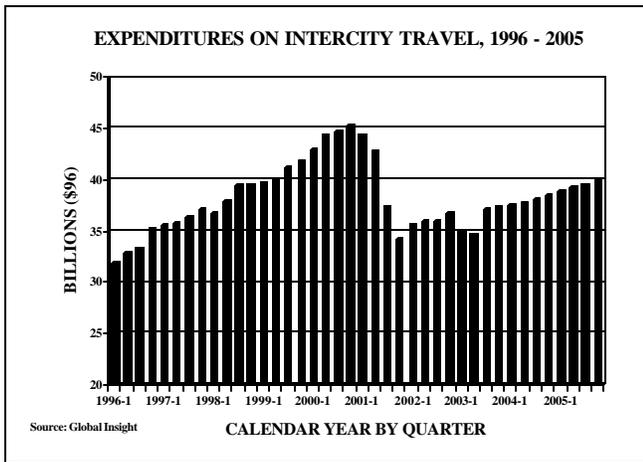
Source: OMB

Oil and Gas Deflator

Index: 1996 = 100



Source: OMB



The aviation industry continues to face risks beyond those faced by most other industries. Although the FAA expects traffic to improve substantially in the near-term, airline finances remain at risk. The legacy carriers continue to struggle toward profitability. As the low-cost carriers, which now carry about a quarter of U.S. airline passengers, continue to gain market share, profitability by the legacy carriers will remain difficult. A potential fare war looms in 2004 as carriers add capacity and fight to fill up the added seats.